Don't Relearn Old Lessons

By AM2 Jason Taylor

You can learn lessons the easy way—from others' mistakes, or the hard way—by making the mistakes yourself. I went the latter route.

I have worked on P-3s for five years, with two years as a collateral duty inspector. My trouble began one night, when my LPO told me to remove the rudder-and-elevator boost packages for another squadron—a loan. When I reached the aircraft, I told my junior workers to remove the packages.

After arriving at the P-3, I realized I had made my first mistake: I was unsure about what the squadron needed. Did they want the entire assembly (cage) or just the boost packages? I stopped work, went back to maintenance control, and asked them about the job. A maintenance-control chief told me the other squadron required only the boost packages, not the entire assembly.

We removed both packages and attaching hardware and turned those items over to the awaiting squadron. Our cannibalized aircraft was in phase, so we were in no hurry to get replacements. Several weeks later, we received new parts from supply and began to reinstall them.

Access to the elevator booster and rudder assemblies is through the "hell hole" in the tail of the aircraft.

We followed the maintenance manuals: 28 maintenance steps from start to finish and 17 CDI steps. That job took several days, with the work passed back and forth between days and nights. An operational check was done, following the MIMs. The functional check flight (FCF) and quality assurance (QA) boxes on the original VIDS-MAFS were checked, but NALCOMIS had a glitch, and those boxes went unchecked on the final VIDS-MAF. The workcenter, maintenance control, and QA missed the fact that a QAR hadn't done an in-process inspection.

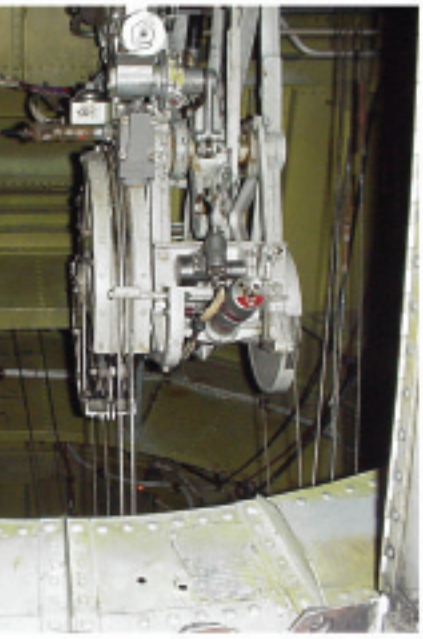
This event was bad enough, but another complication developed. The VIDS-MAF had been signed off; however, several of the people listed on that document hadn't even worked on the job.

Several months and 71 flights later, another CDI did a final check on a job near the boost packages and found loose hardware in

the "hellhole." We found the saddle clamps and mounting bolts for both packages were missing, as well as a locking screw, washer and spacer. The cannon plugs on the boost packages also had not been lock-wired into place.

Five months had passed since we had removed and replaced those items. Over the intervening months, several other maintenance actions had been done in the hellhole area. I had been deployed and had returned a month after this problem was discovered. QA asked for a statement about the boost-package installs. After such a long time, I couldn't remember much about the job, so my statement was vague—to say the least.

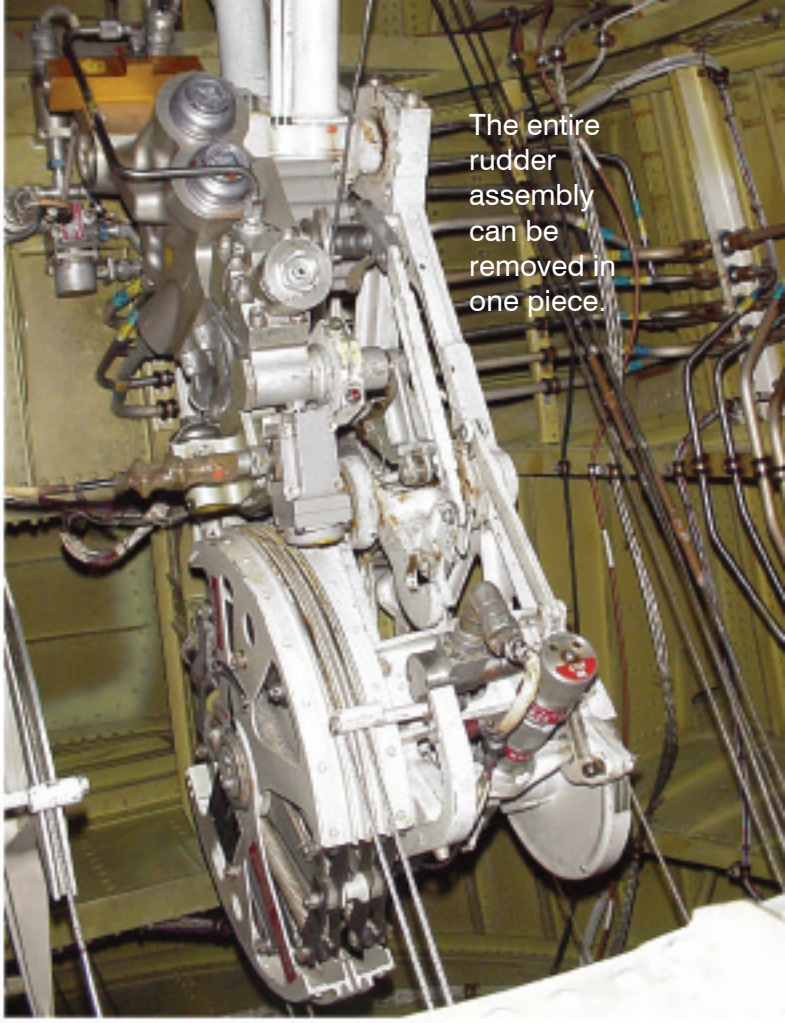
QA made several inquiries and found six installation steps had been missed. The operational check required the AEs to test the autopilot, but no assist VIDS-MAF had been issued. The pass-down between nights and days had been only a verbal one; no one had bothered to write anything in the logbook. In-process inspections should have been recorded so anyone could tell what tasks had been accomplished. The CDI should have made an entry to show what steps were done and where work had stopped.



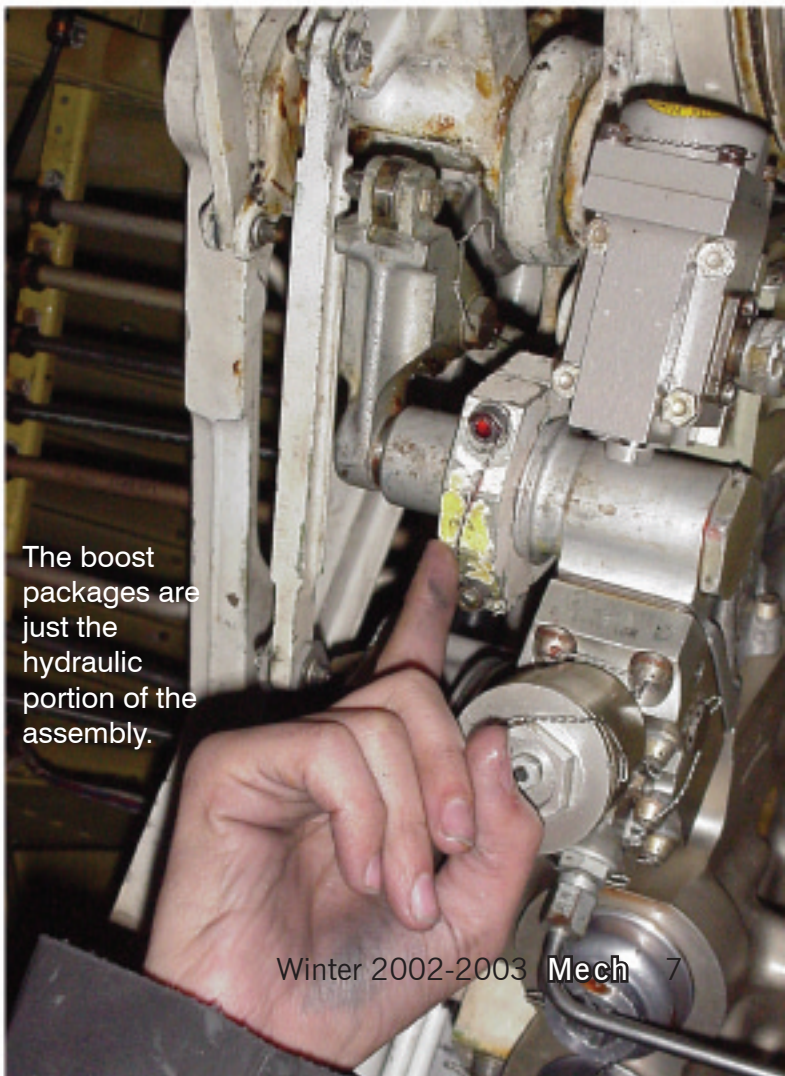
We are trained on the 18-inch rule, and sometimes we need to expand that range. Because of this incident, the maintenance department took a step back and scrutinized all our maintenance practices.

I learned several valuable lessons from this ordeal and now realize mistakes become prevalent when work becomes routine. I should have learned from other maintainers' mistakes but didn't. You now have the chance to learn from me.

Petty Officer Taylor wrote this story while assigned to VQ-1.



The entire rudder assembly can be removed in one piece.



The boost packages are just the hydraulic portion of the assembly.